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FROM: Winston Hsu, PATENT AGENT, REG NO. : 41,526

SERIAL NO.: 09/682,303

ATTORNEY DOCKET NO.: NAUP0303USA

SUBJECT: INFORMATION DISCLOSURE STATEMENT

TOTAL PAGES: 22 PAGES (INCLUDING COVER PAGE)

Winston Hsu 2004/10/21

NAUP0303USA0_D1_1

PTO/SB/97 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031

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(1) Transmittal Form	1 PAGE
(2) Fee Transmittal	1 PAGE
(3) Information Disclosure Statement	18 PAGES

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PTO/SB/21 (09-04)

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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	09/682,303	
	Filing Date	08/16/2001	
	First Named Inventor	Jui-Lung Chen	
	Art Unit	2816	
	Examiner Name	LUU, AN T	
Total Number of Pages in This Submission	20	Attorney Docket Number	NAUP0303USA

ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below):
Remarks		
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT		
Firm Name	North America Intellectual Property Corporation	
Signature	<i>Winston Hsu</i>	
Printed name	Winston Hsu	
Date	10/21/2004	Reg. No. 41,526

CERTIFICATE OF TRANSMISSION/MAILING		
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PTO/SB/17 (10-04)
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FEE TRANSMITTAL for FY 2005

Effective 10/01/2004. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$180.00)

Complete if Known

Application Number 09/682,303
Filing Date 08/16/2001
First Named Inventor Jui-Lung Chen
Examiner Name LUU, AN T
Art Unit 2816
Attorney Docket No. NAUP0303USA

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit Account Number 50-3105
Deposit Account Name North America Intellectual Property Corp.

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments

☒ Charge any additional fee(s) or any underpayment of fee(s)

☐ Charge fee(s) indicated below, except for this filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 790	2001 395	Utility filing fee	
1002 330	2002 175	Design filing fee	
1003 550	2003 275	Plant filing fee	
1004 790	2004 395	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	

SUBTOTAL (1) (\$0.00)

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims -20** = X =
Independent Claims -3** = X =
Multiple Dependent =

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1202 18	2202 9	Claims in excess of 20	
1201 88	2201 44	Independent claims in excess of 3	
1203 300	2203 150	Multiple dependent claim, if not paid	
1204 88	2204 44	** Reissue independent claims over original patent	
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent	

SUBTOTAL (2) (\$0.00)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 430	2252 215	Extension for reply within second month	
1253 980	2253 490	Extension for reply within third month	
1254 1,530	2254 765	Extension for reply within fourth month	
1255 2,080	2255 1,040	Extension for reply within fifth month	
1401 340	2401 170	Notice of Appeal	
1402 340	2402 170	Filing a brief in support of an appeal	
1403 300	2403 150	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavolable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,370	2501 685	Utility issue fee (or reissue)	
1502 480	2502 245	Design issue fee	
1503 860	2503 330	Plant issue fee	
1450 130	1480 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	180
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 790	2809 395	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 790	2810 395	For each additional invention to be examined (37 CFR 1.129(b))	
1801 790	2801 395	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$180.00)

SUBMITTED BY

Name (Print/Type) Winston Hsu Registration No. 41,526 Telephone 888-2-89237350
Signature *Winston Hsu* (Attorney/Agent) Date 10/21/2004

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Jui-Lung Chen Shih-Huang Huang
5 Examiner: An T. Luu
Filing Date: 08/16/2001 Art Unit: 2816
App. No.: 09/682,303 Docket No.: NAUP0303USA

Title: DELAY LOCK CIRCUIT USING BISECTION ALGORITHM AND
10 RELATED METHOD

To: Commissioner of Patents
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Subject: Information disclosure statement Under
37C.F.R.\$1.56 and 37C.F.R.\$1.97(d).
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Dear Sir or Madame:

This is an Information Disclosure Statement in accordance
with the duty to disclose information material to
25 patentability under 37 C.F.R. \$1.56. Applicants wish to make
of record the document listed on the accompanying form
PTO/SB/08. It is respectfully requested that the Examiner
initial the cited references on the form and that it be made
of record in the application and that a copy of the initialed
30 form be sent to Applicants with the next communication from
the Examiner.

Since the IDS is filed after the mailing date of a notice of allowance, and on or before a payment of the issue fee, the requirement set forth in §1.97(d) is satisfied. Items of information contained in the information disclosure statement
5 were cited in communication from PRC Patent Office on 07/25/2004 for a counterpart foreign application.

The cited reference, JP publication number No. H10-13219, teaches a DLL circuit. As shown in Fig.1, the block
10 diagram discloses a configuration of the cited art DLL circuit 14. The DLL circuit 14 comprises a phase detector 11 for comparing the phase difference between the external clock signal 6 and the internal clock signal 7, a control signal generating circuit 13 for generating a control signal
15 according to the comparison results 8-1, 8-2, 9-1, 9-2, and 10 of the phase detector 11, a plurality of delay units 3 for delaying the external clock signal 6, a multiplexer 4 for selecting a certain number of the delay units 3 according to the control signal outputted from the control signal
20 generating circuit 13, and a clock driver 5 for generating the internal clock signal 7 according to the selected delay units. A delay unit 3 is a smallest unit, which delays the external clock signal 6. Since the control signal generating circuit 13 is capable of determining a total number of used
25 delay unit 3 according to a comparison result generated from the phase detector 11, it transmits the control signal to the multiplexer 4 for driving the multiplexer 4 to select the required delay units 3.

30 Independent Claim 11 of the present invention, listed in the response to the Office action dated 06/03/2004, is repeated here for reference.

11. A delay lock circuit for generating a second clock according to a first clock and synchronizing the first clock and the second clock, the delay lock circuit comprising:

5 a comparator for determining if corresponding periods of the first clock and the second clock are synchronized and generating a corresponding comparison signal;
a delayer electrically connected to the comparator for
10 delaying the first clock so as to change a delay time between the corresponding periods of the first clock and the second clock; and
a controller to control the delay lock circuit;
wherein the controller uses the delayer to perform a
15 correcting process to increase or decrease the delay time between the corresponding periods of the first clock and the second clock by a correction interval, wherein a
subsequent correction interval of a subsequent correcting process is less than a previous correction interval of a
20 **previous correcting process**, and the controller terminates the correcting process if the correction interval is smaller than a predetermined value.

However, the cited reference fails to teach or suggest
25 that **"a subsequent correction interval of a subsequent correcting process is less than a previous correction interval of a previous correcting process."** Based on the above difference, it is believed that claim 11 is substantially different from the cited reference. And claims 12-14 are
30 dependent on claim 11, they are believed to be substantially different from the cited reference.

Independent Claim 16 of the present invention, listed in the response to the Office action dated 06/03/2004, is repeated here for reference.

- 5 16. A method for performing a delay lock to generate a second clock according to a first clock and to synchronize the second clock with the first clock, the method comprising:
executing a plurality of correcting processes, each of
which increases or decreases by a respective
10 correction interval a respective delay time between corresponding periods of the first clock and the second clock; and
terminating the plurality of correcting processes when
the correction interval is smaller than a
15 predetermined value;
wherein a subsequent correction interval for a subsequent correcting process is less than a previous correction interval of a previous correcting process.

- 20 Similarly, as mentioned above, the cited reference fails to teach or suggest that "a subsequent correction interval of a subsequent correcting process is less than a previous correction interval of a previous correcting process." Based on the above difference, it is believed that claim 16 is
25 substantially different from the cited reference. And claims 17-24 are dependent on claim 16, they are believed to be substantially different from the cited reference.

Sincerely yours,

5 Winston Hsu

Date: October 21, 2004

Winston Hsu, Patent Agent No. 41,526

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Complete if Known

(Use as many sheets as necessary)

Sheet	1	of	1
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Application Number	09/682,303
Filing Date	08/16/2001
First Named Inventor	Jui-Lung Chen
Art Unit	2816
Examiner Name	LUU, AN T
Attorney Docket Number	NAUP0303USA

[illegible][illegible]

Examiner Signature	Date Considered
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.

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